

# Reno/Tahoe IAP (ANG) Electric Distribution System

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# **J9 Reno/Tahoe IAP (ANG) Electric Distribution System**

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## **J9.1 Reno/Tahoe IAP (ANG) Overview**

## **J9.2 Electric Distribution System Description**

The Reno/Tahoe IAP, Nevada Air National Guard, 152<sup>nd</sup> Airlift Wing is located at the Reno/Tahoe International Airport (RTIA) in Reno, Nevada. The base is located on the southwest side of RTIA on a 60 acre parcel. The base has 37 buildings; 13 administrative, 23 industrial, and 1 services, amounting to approximately 302,000 square feet. Day-to-day activities are managed by a force of 250 full-time personnel. One weekend per month this population swells to more than 1100 members during military training assemblies. The base has no residential or transient housing facilities. The RTIA is located four miles southeast of the Reno central business district. Reno has been the regional ANG center for northern Nevada for over one hundred years. On June 30, 1954 the Nevada ANG entered into a 100-year lease agreement with the City of Reno for use of land at the Reno Airport, today known as the Reno/Tahoe International Airport. The lease was later assumed by the Airport Authority of Washoe County. Over the years, the Nevada ANG has funded numerous airport improvements that have benefited the community and facilitated commercial airline expansion at the airport. Currently, more than \$33 million per year goes into the local economy as a result of Nevada ANG salaries and local purchases. The history of Nevada ANG is one of growth, change, and vigilance. In early 1995, they began converting from the RF-4C fighter aircraft to the C-130 Hercules transport aircraft. The mission of the 152<sup>nd</sup> Airlift Wing is to train, equip, and maintain units and individuals to meet worldwide requirements for federal day-to-day and mobilization missions and state emergencies.

### **J9.2.1 Electric Distribution System Fixed Equipment Inventory**

The Reno/Tahoe IAP (ANG) electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, defined by the Right of Way. The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, switches, and other ancillary fixed equipment. The actual inventory of items sold will be in the bill of sale at the time the system is transferred. The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The Government makes no representation that the inventory is accurate. The Contractor shall base its proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description and inventory. Under no circumstances shall the Contractor be entitled to any service charge adjustments based on the accuracy of the following description and inventory.

Specifically excluded from the electric distribution system privatization are:

- Airfield lighting
- Parking lot lights

- Street lights
- Ballfield lights

### J9.2.1.1 Description

Electrical power enters the base at a single location at 25 kV and is stepped down to 4160 volts and metered (See J9.4 for details). The configuration is a looped system distributed at 4160 volts. It runs overhead and underground and services 37 facilities. The system consists of primary and secondary distribution lines (approximately 6,300 linear feet of overhead primary, 2,800 linear feet of overhead secondary, and 13,300 linear feet underground primary); 24 single-phase transformers ranging from 15 to 100 kVA; 14 3-phase transformers ranging from 75 to 750 kVA; 46 air line switches; 29 wooden utility poles 30 to 45 feet tall; four pre-cast concrete manholes; and one pad-mounted 3-way switch. There are no substations, switching gear, or unique components associated with this system. The system capacity is adequate to meet current and future demands.

### J9.2.1.2 Inventory

**Table 1** provides a general listing of the major electric distribution system fixed assets for the Reno/Tahoe IAP (ANG) electric distribution system included in the sale.

**TABLE 1**  
Fixed Inventory  
Electric Distribution System Reno/Tahoe IAP (ANG)

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>Underground Circuits</b>	AWG			
3ph, 3w, 4000v in conduit	#1/0	137	LF	1989
3ph, 3w, 4000v in conduit	#1/0	405	LF	1985
3ph, 3w, 4000v in conduit	#1/0	1068	LF	1977
3ph, 3w, 4000v in conduit	#1/0	135	LF	1976
3ph, 3w, 4000v in conduit	#1/0	625	LF	1972
3ph, 3w, 4000v in conduit	#1/0	720	LF	1970
3ph, 3w, 4000v in conduit	#1/0	540	LF	1968
3ph, 3w, 4000v in conduit	#1/0	2250	LF	1968
3ph, 3w, 4000v in conduit	#1/0	170	LF	1980
3ph, 3w, 4000v in conduit	#1/0	140	LF	1984
3ph, 3w, 4000v in conduit	#1/0	625	LF	1993
3ph, 3w, 4000v in conduit	#2CU	260	LF	1997
3ph, 3w, 4000v in conduit	#2CU	325	LF	1999
3ph, 3w, 4000v in conduit	#4CU	675	LF	1964
3ph, 3w, 4000v in conduit	#4CU	620	LF	1959
3ph, 3w, 4000v in conduit	#4CU	130	LF	1957

Item	Size	Quantity	Unit	Approximate Year of Construction
3ph, 3w, 4000v in conduit	#4CU	4430	LF	1955
<b>Overhead Circuits</b>				
3ph, 3w, conductor	#4CU	485	LF	1976
3ph, 3w, conductor	#4CU	540	LF	1972
3ph, 3w, conductor	#4CU	720	LF	1970
3ph, 3w, conductor	#4CU	458	LF	1966
3ph, 3w, conductor	#4CU	115	LF	1962
3ph, 3w, conductor	#4CU	252	LF	1960
3ph, 3w, conductor	#4CU	635	LF	1959
3ph, 3w, conductor	#4CU	100	LF	1959
3ph, 3w, conductor	#4CU	600	LF	1957
3ph, 3w, conductor	#4CU	2,385	LF	1955
3ph, 3w, weatherproof drop	#2	180	LF	1977
3ph, 3w, weatherproof drop	#2	40	LF	1976
3ph, 3w, weatherproof drop	#2	60	LF	1970
3ph, 3w, weatherproof drop	#2	50	LF	1966
3ph, 3w, weatherproof drop	#2	45	LF	1962
3ph, 3w, weatherproof drop	#2	2,446	LF	1955
<b>3 Phase Transformers</b>		kVA		
Oil-filled, pad-mounted	75	1	EA	1985
Oil-filled, pad-mounted	150	1	EA	1988
Oil-filled, pad-mounted	300	1	EA	1977
Oil-filled, pad-mounted	300	1	EA	1976
Oil-filled, pad-mounted	300	1	EA	1993
Oil-filled, pad-mounted	500	1	EA	1966
Oil-filled, pad-mounted	500	3	EA	1977
Oil-filled, pad-mounted	500	1	EA	1968
Oil-filled, pad-mounted	500	1	EA	1990
Oil-filled, pad-mounted	500	1	EA	1960
Oil-filled, pad-mounted	500	1	EA	1998
Oil-filled, pad-mounted	750	1	EA	1978
Oil-filled, pad-mounted	750	1	EA	1994

Item	Size	Quantity	Unit	Approximate Year of Construction
<b>1-Phase Transformers</b>	kVA			
Pole mounted	15	6	EA	1962
Pole mounted	15	3	EA	1976
Pole mounted	37.5	3	EA	1970
Pole mounted	75	3	EA	1955
Pole mounted	75	3	EA	1962
Pole mounted	75	3	EA	1970
Pole mounted	100	3	EA	1966
<b>Utility Poles – Wood</b>	Height (Ft)			
	30	6	EA	1955
	40	4	EA	1960
	40	4	EA	1997
	45	9	EA	1955
	45	2	EA	1959
	45	1	EA	1970
	45	3	EA	1976
<b>Switches – Underground (pad-mounted, 5kVA/600A)</b>	3-Way	1	EA	1997
<b>Switches – Overhead Line</b>				
- Fused with lighting arrest	600 A-L	42	EA	1993
- Air Lines Switches	600 A-L	4	EA	1993
<b>Electric Meters</b>	3phase, watt/hour	18	EA	Various
<b>Manholes (Precast concrete 4x6x6)</b>		4	EA	1993

Notes:

AWG = American Wire Gauge

EA = each

LF = linear feet

KVA = nominal kilovolt-amperes

Ph – phase

V = volts

W = wire

## J9.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

**TABLE 2**

Spare Parts

Electric Distribution System Reno/Tahoe IAP (ANG)

Qty	Item	Make/Model	Description	Remarks
None				

**TABLE 3**

Specialized Vehicles and Tools

Electric Distribution System Reno/Tahoe IAP (ANG)

Description	Quantity	Location	Maker
None			

### J9.2.3 Electric Distribution System Manuals, Drawings, and Records

Table 4 lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**

Manuals, Drawings, and Records

Electric Distribution System Reno/Tahoe IAP (ANG)

Qty	Item	Remarks
1	Electrical Utility System Maps (Electronic Copy)	AutoCAD Release Version 14

## J9.3 Specific Service Requirements

The service requirements for the Reno/Tahoe IAP (ANG) electric distribution system are as defined in the Section C, Description/Specifications/Work Statement. The following requirements are specific to the Reno/Tahoe IAP (ANG) electric distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C: None.

## J9.4 Current Service Arrangement

- Provider Name: Sierra Pacific Power Company
- Average Annual Usage: 3,894 mWh/year
- Maximum Monthly Use: 386 mWh/month
- Minimum Monthly Use: 262 mWh/month
- Sierra Pacific Power Company (SPPC) owns approximately 110 LF of main distribution service line that enters underground at south base fence south of National Guard Way. The service runs parallel and 15 feet east of the west base fence to a 750 kVA pad mounted transformer (owned by SPPC) and then approximately 20 feet underground to the SPPC

owned utility pole and then rises 40 feet up the pole to SPPC master metering hardware on the lower cross arm.

## J9.5 Secondary Metering

### J9.5.1 Existing Secondary Meters

**Table 5** provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3 and J9.6 below.

**TABLE 5**

Existing Secondary Meters

Electric Distribution System Reno/Tahoe IAP (ANG)

Meter Location	Meter Description
Bldg 9 – Hangar (low meter)	3-Phase, Watt-Hour
Bldg 9 – Hangar (high meter)	3-Phase, Watt-Hour
Bldg 10 – Supply	3-Phase, Watt-Hour
Bldg 12 – Fire House	3-Phase, Watt-Hour
Bldg 13 – Motor Pool	3-Phase, Watt-Hour
Bldg 56 – Headquarters	3-Phase, Watt-Hour
Bldg 61 – Metals	3-Phase, Watt-Hour
Bldg 76 – Avionics	3-Phase, Watt-Hour
Bldg 78 – Security	3-Phase, Watt-Hour
Bldg 82 – Engine Shop	3-Phase, Watt-Hour
Bldg 84 – Operations	3-Phase, Watt-Hour
Bldg 88 – Civil Engineering	3-Phase, Watt-Hour
Bldg 90 – Telecommunications	3-Phase, Watt-Hour
Bldg 101 – RUBB Bldg	3-Phase, Watt-Hour
Bldg 111 – MedDine	3-Phase, Watt-Hour
Bldg 112 – Intelligence	3-Phase, Watt-Hour
Bldg 116 Photo Interpretation Facility	3-Phase, Watt-Hour
Engine Test Cell (no bldg number)	3-Phase, Watt-Hour

### J9.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 6**. New secondary meters shall be installed IAW Paragraph C.13 Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J9.6 below.

**TABLE 6**

New Secondary Meters

Electric Distribution System Reno/Tahoe IAP (ANG)

Meter Location	Meter Description
None	

## J9.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the person identified at time of contract award.
2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the person identified at time of contract award.
3. Meter Reading Report. The monthly meter reading report shall show the current and previous month readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to the person identified at time of contract award.
4. System Efficiency Report. If required by Paragraph C.3, the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer. System efficiency reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. System efficiency reports shall be submitted to the person identified at time of contract award.

## J9.7 Energy Saving Projects

IAW Paragraph C.3 Requirement, the following projects have been implemented on the distribution system by the Government for energy conservation purposes: None.

## J9.8 Service Area

IAW Paragraph C.4 Service Area, the service area is defined as all areas within the Reno/Tahoe IAP (ANG) boundaries.

## J9.9 Off-Installation Sites

No off-installation sites are included in the sale of the Reno/Tahoe IAP (ANG) electric distribution system.



## J9.10 Specific Transition Requirements

IAW Paragraph C.13 Transition Plan, **Table 7** provides a listing of service connections and disconnections required upon transfer.

**TABLE 7**

Service Connections and Disconnections  
Electric Distribution System Reno/Tahoe IAP (ANG)

Location	Description
None	

## J9.11 Government Recognized System Deficiencies

**Table 8** provides a listing of system improvements that the Government has planned. The Government recognizes these improvement projects as representing current deficiencies associated with the Reno/Tahoe IAP (ANG) electric distribution system. If the system is sold, the Government will not accomplish these planned improvements. The Contractor shall make a determination as to its actual need to accomplish and the timing of any and all such planned improvements. Capital upgrade projects shall be proposed through the Capital Upgrades and Renewals and Replacements Plan process and will be recovered through Schedule L-3. Renewal and Replacement projects will be recovered through Sub-CLIN AB.

**TABLE 8**

System Deficiencies  
Electric Distribution System Reno/Tahoe IAP (ANG)

Project Location	Project Description
None	